FIG.1

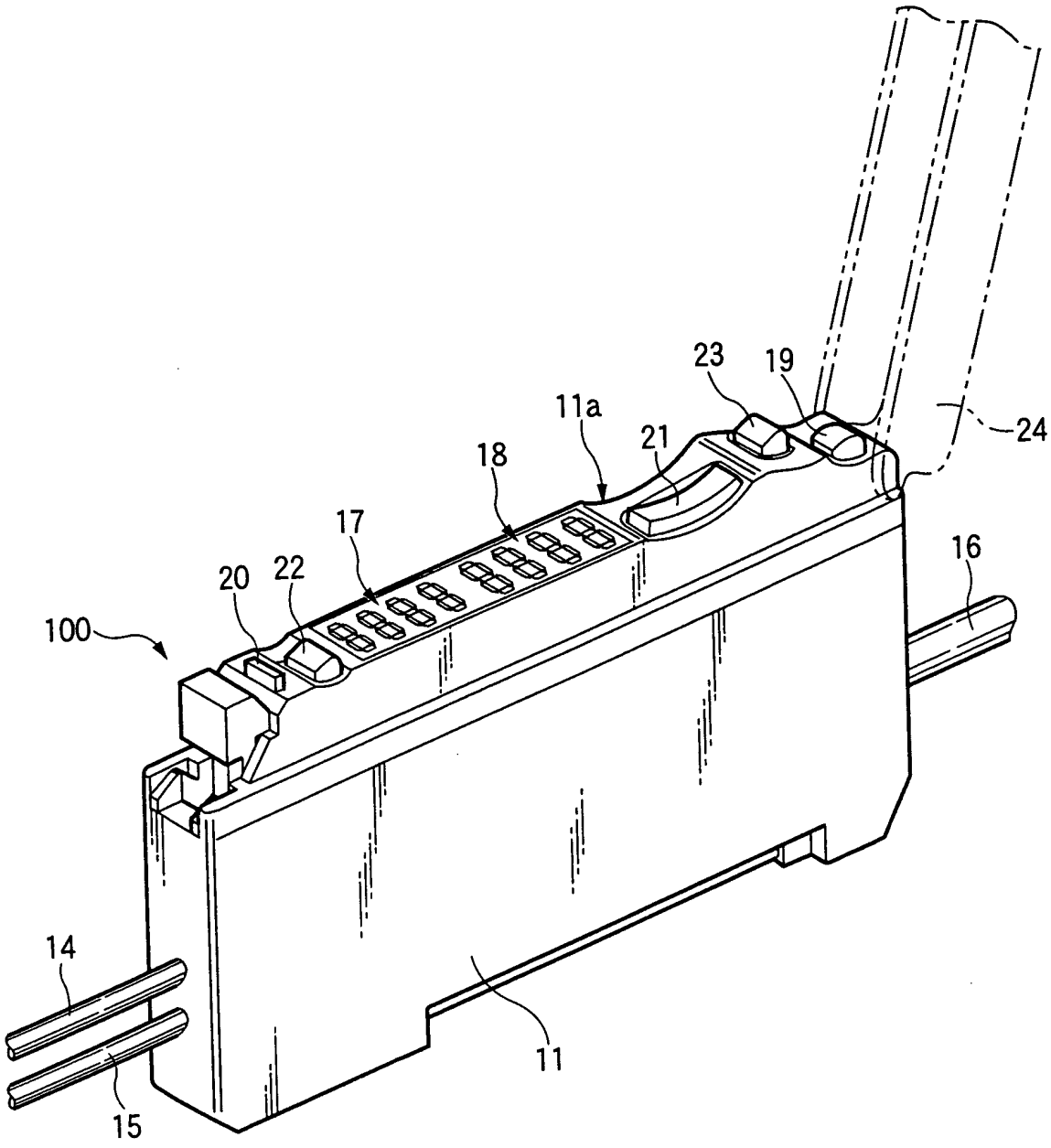


FIG.2

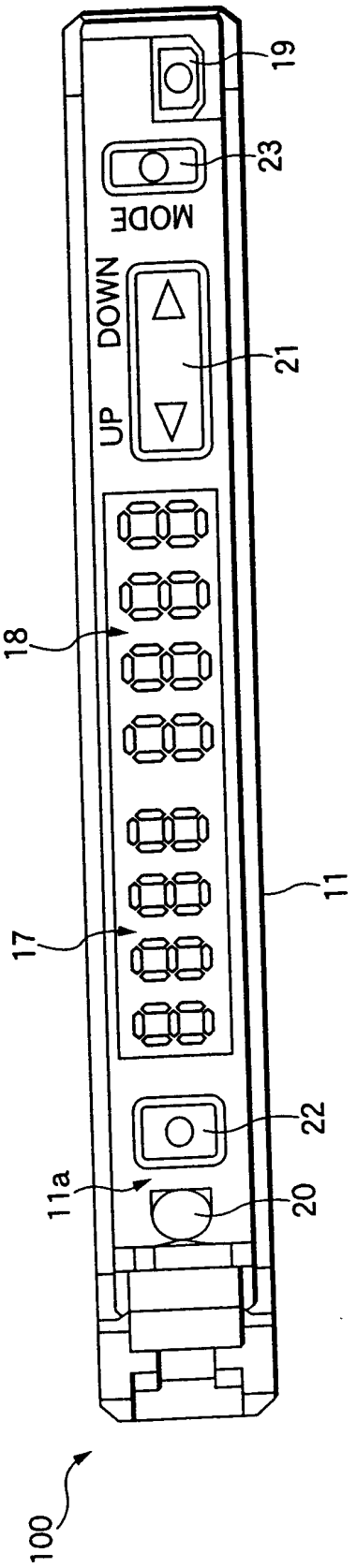


FIG.3

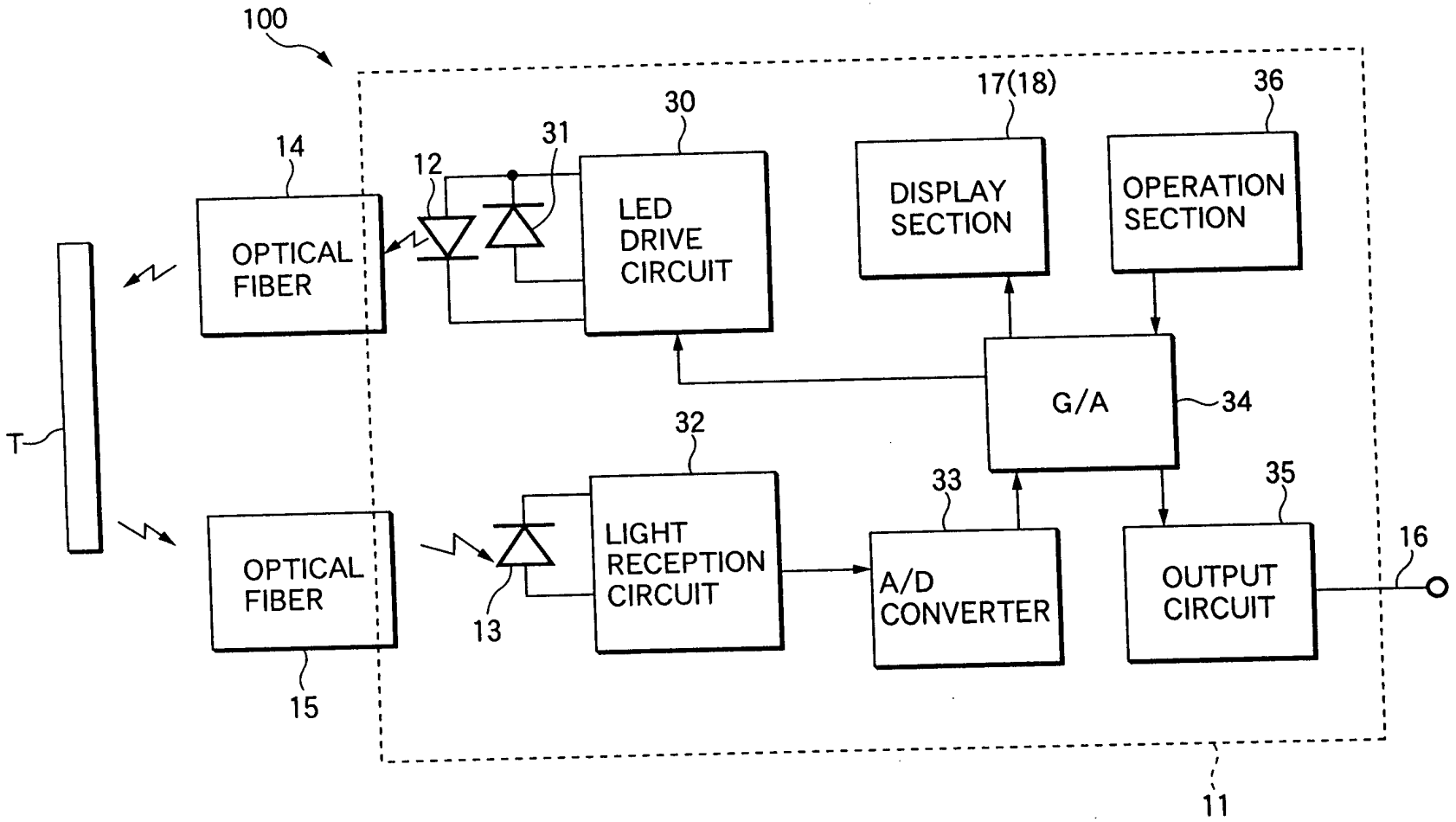

100
14
OPTICAL FIBER
12
31
30
LED DRIVE CIRCUIT
17(18)
DISPLAY SECTION
36
OPERATION SECTION
G/A
34
T
32
LIGHT RECEPTION CIRCUIT
13
33
A/D CONVERTER
35
OUTPUT CIRCUIT
16
OPTICAL FIBER
15
11

FIG.4

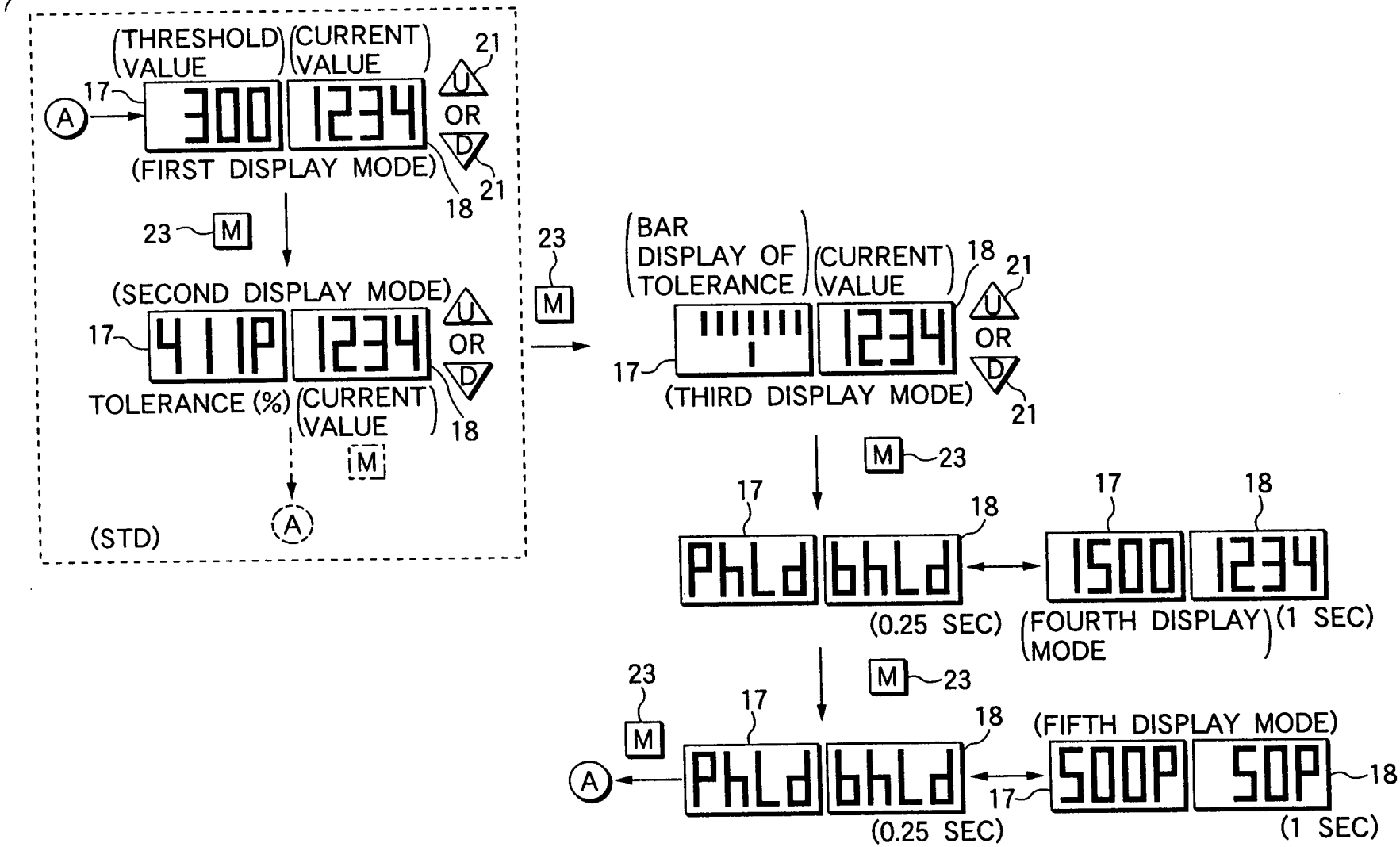

(THRESHOLD VALUE)
(CURRENT VALUE)
17
21
A
300
1234
U
OR
D
(FIRST DISPLAY MODE)
18
21
23
M
(SECOND DISPLAY MODE)
4 1 1P
1234
TOLERANCE (%)
(CURRENT VALUE)
(STD)
(BAR DISPLAY OF TOLERANCE)
(THIRD DISPLAY MODE)
PhLd
bhLd
(0.25 SEC)
1500
(FOURTH DISPLAY MODE)
(1 SEC)
(FIFTH DISPLAY MODE)
500P
50P

FIG.5

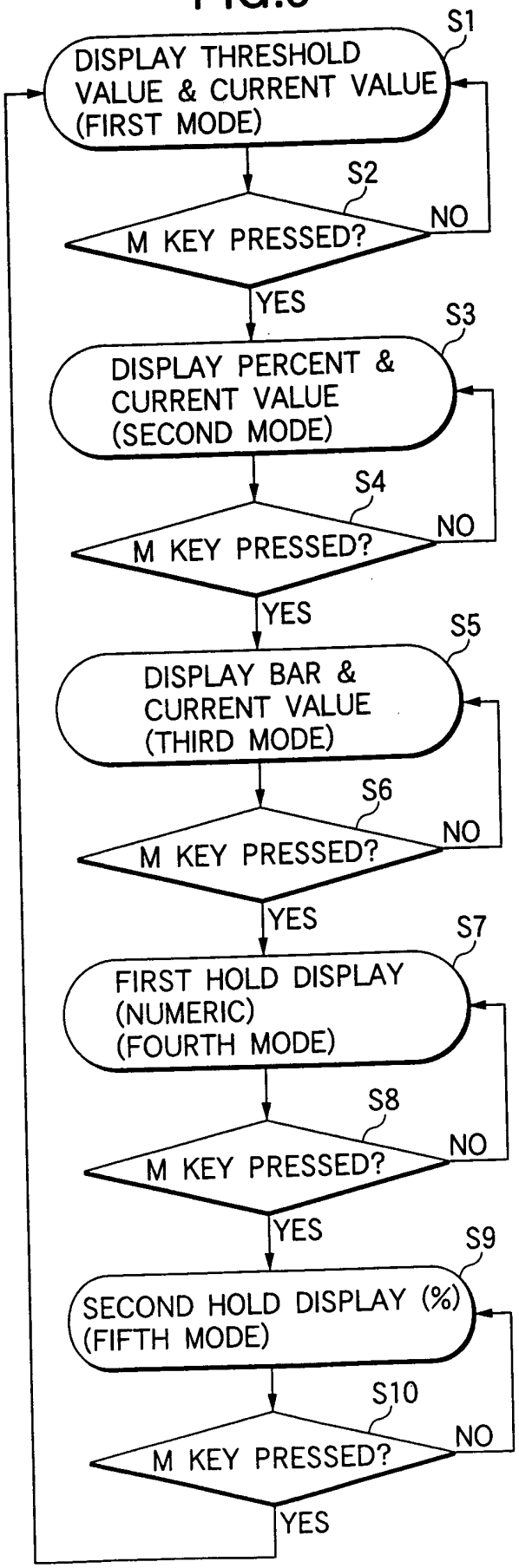

S1
DISPLAY THRESHOLD VALUE & CURRENT VALUE (FIRST MODE)
S2
M KEY PRESSED?
NO
YES
S3
DISPLAY PERCENT & CURRENT VALUE (SECOND MODE)
S4
M KEY PRESSED?
NO
YES
S5
DISPLAY BAR & CURRENT VALUE (THIRD MODE)
S6
M KEY PRESSED?
NO
YES
S7
FIRST HOLD DISPLAY (NUMERIC) (FOURTH MODE)
S8
M KEY PRESSED?
NO
YES
S9
SECOND HOLD DISPLAY (%) (FIFTH MODE)
S10
M KEY PRESSED?
NO
YES

FIG.6

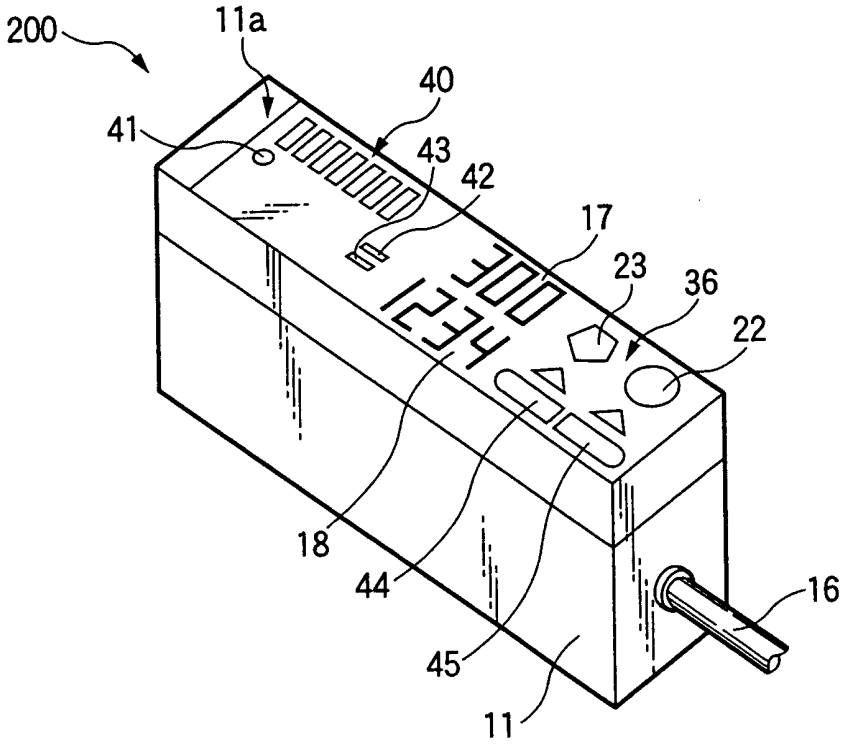


FIG.7

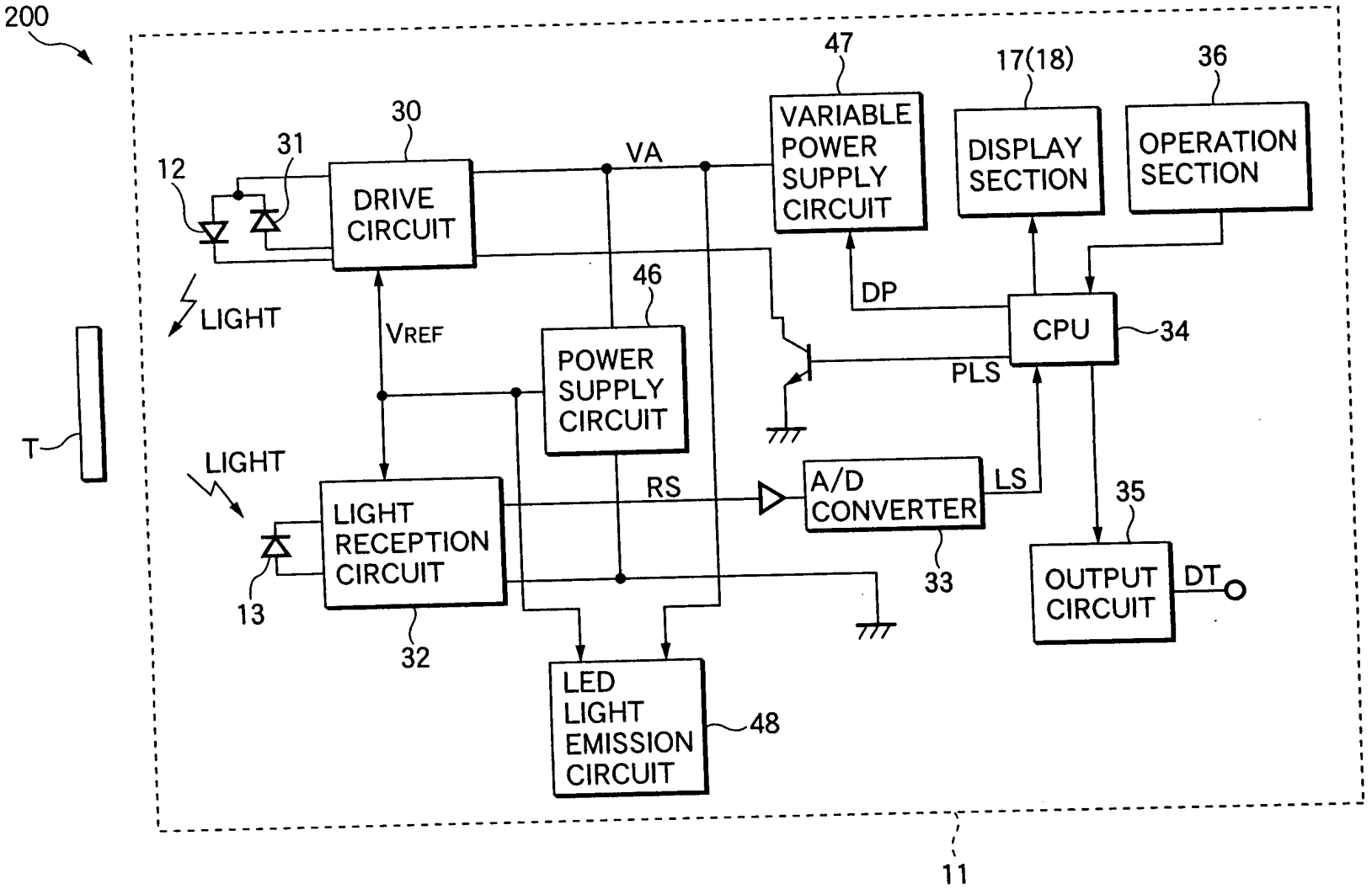

200
47
17(18)
36
30
31
12
VARIABLE POWER SUPPLY CIRCUIT
DISPLAY SECTION
OPERATION SECTION
DRIVE CIRCUIT
VA
LIGHT
VREF
46
DP
CPU
34
POWER SUPPLY CIRCUIT
PLS
T
LIGHT
RS
A/D CONVERTER
LS
35
LIGHT RECEPTION CIRCUIT
33
OUTPUT CIRCUIT
DT
13
32
LED LIGHT EMISSION CIRCUIT
48
11

FIG.8

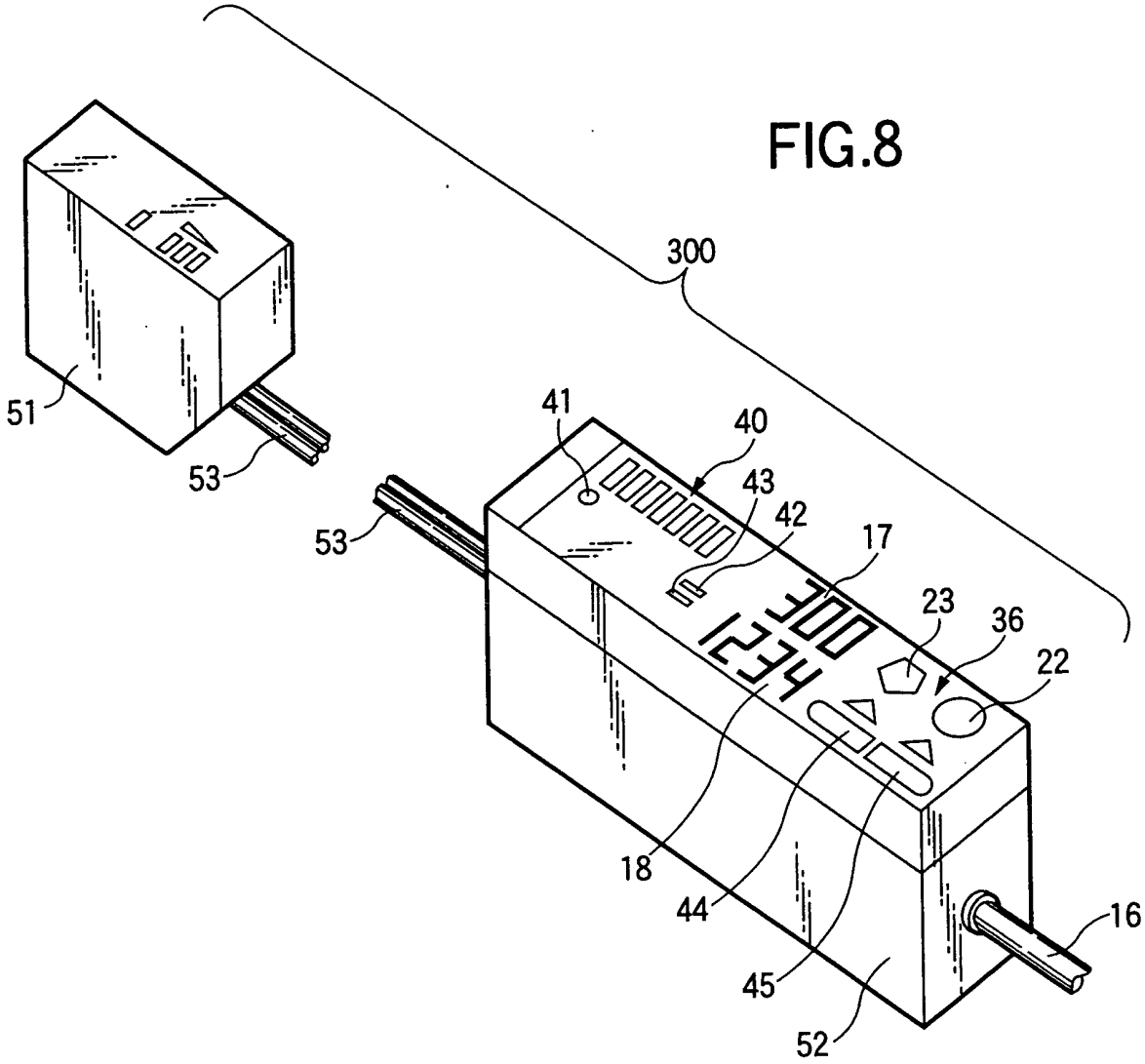

300
51
53
41
40
43
42
17
23
36
22
53
18
44
45
16
52

FIG.9

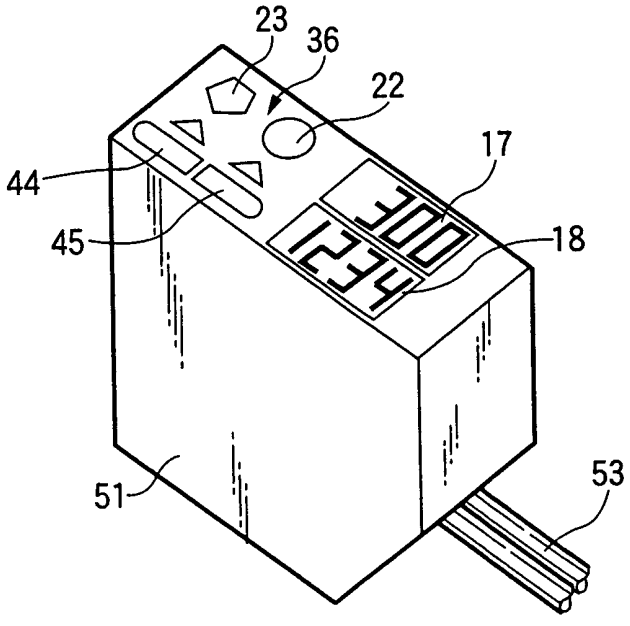

23
36
22
17
44
45
18
51
53

FIG.10

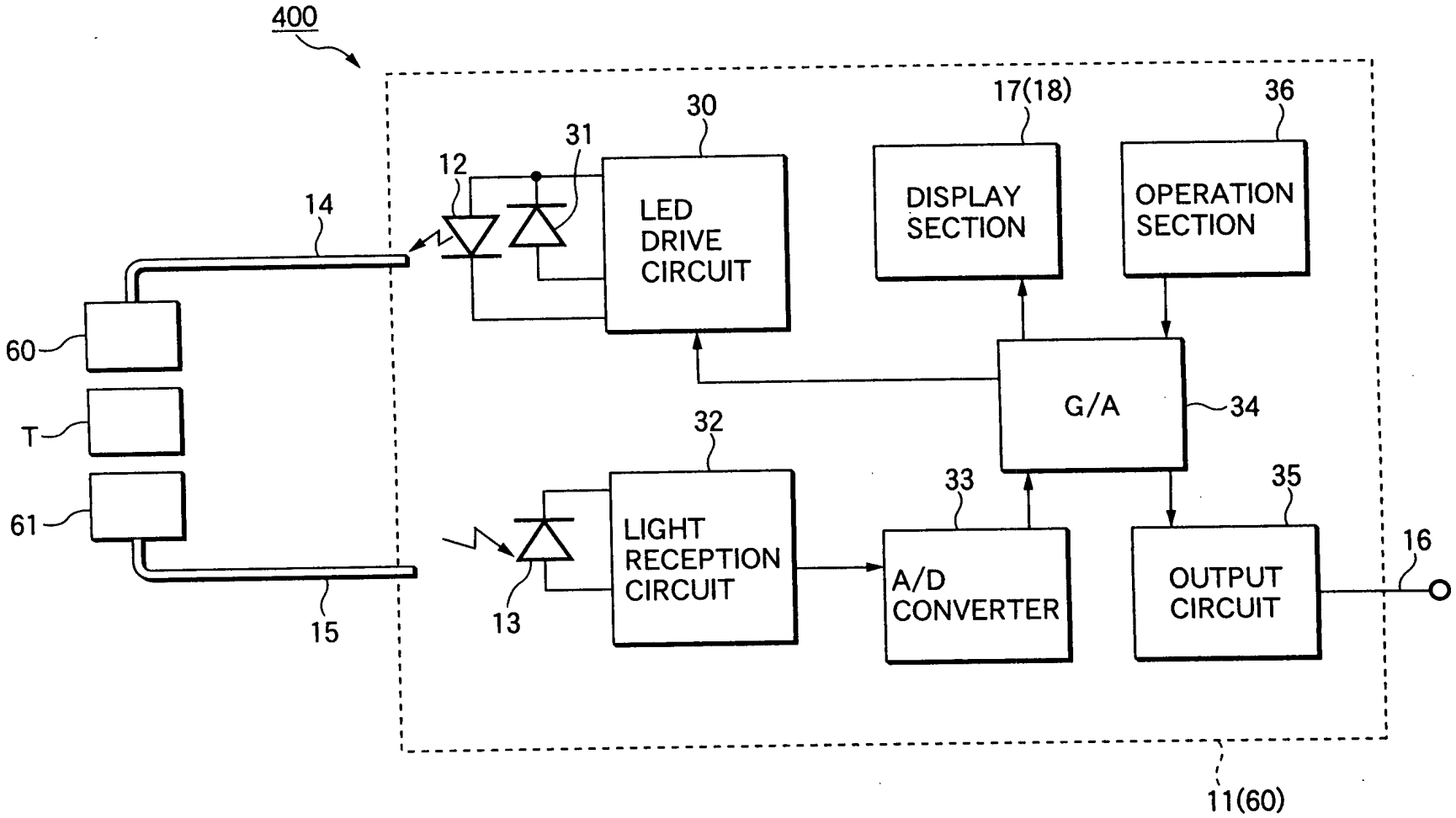

400
30
31
12
14
LED
DRIVE
CIRCUIT
17(18)
DISPLAY
SECTION
36
OPERATION
SECTION
60
T
61
G/A
34
32
33
35
16
LIGHT
RECEPTION
CIRCUIT
A/D
CONVERTER
OUTPUT
CIRCUIT
13
15
11(60)

FIG.11

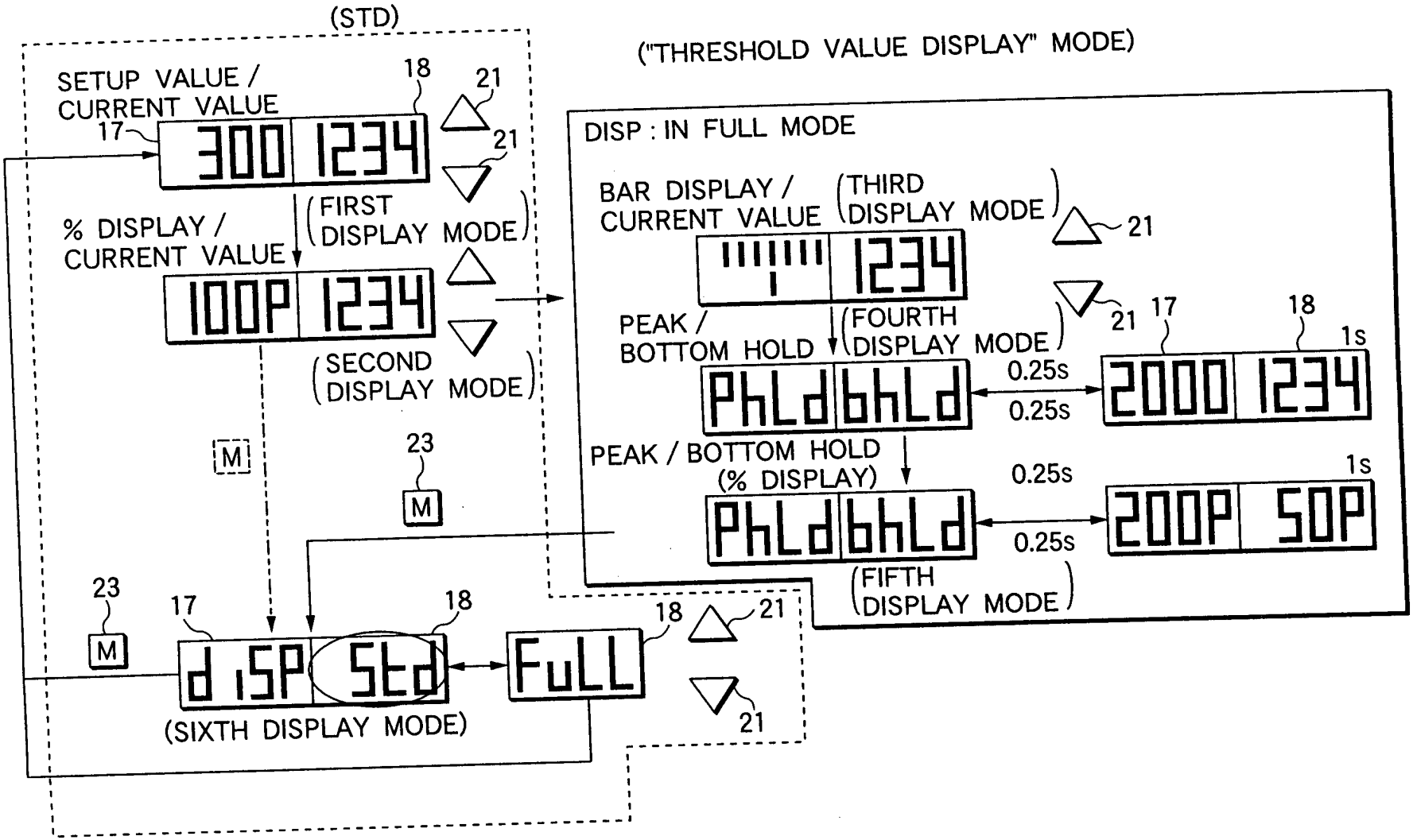
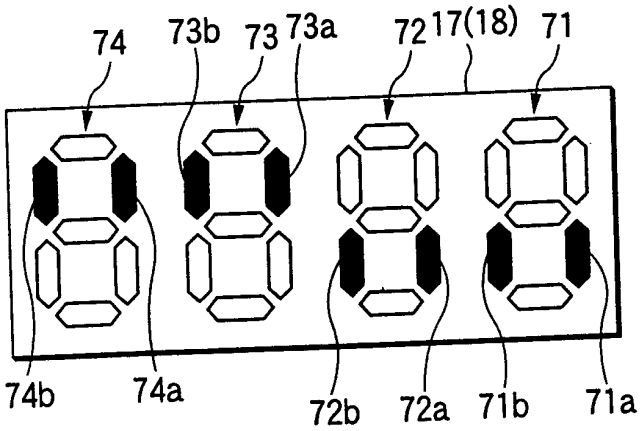

(STD)
("THRESHOLD VALUE DISPLAY" MODE)
SETUP VALUE / CURRENT VALUE
17
18
21
300 1234
% DISPLAY / CURRENT VALUE
100P 1234
(FIRST DISPLAY MODE)
(SECOND DISPLAY MODE)
DISP : IN FULL MODE
BAR DISPLAY / CURRENT VALUE
(THIRD DISPLAY MODE)
1234
PEAK / BOTTOM HOLD
(FOURTH DISPLAY MODE)
PHLd bHLd
0.25s
0.25s
2000 1234
1s
PEAK / BOTTOM HOLD (% DISPLAY)
PHLd bHLd
200P 50P
(FIFTH DISPLAY MODE)
M
23
d ISP SEd
FULL
(SIXTH DISPLAY MODE)

FIG.12



PRIOR ART

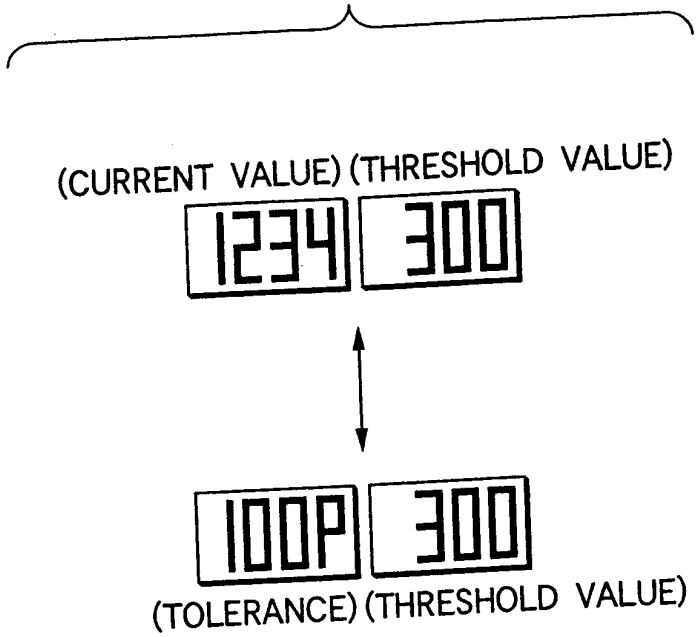



FIG.13